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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,576	07/24/2001	John Thomas Allen	SUREB-57333	6668
39607 7590 01/08/2007 PETER K HAHN			EXAMINER	
•	ARD, HAMILTON, SO	MCKANE, ELIZABETH L		
600 WEST BROADWAY SUITE 2600			ART UNIT	PAPER NUMBER
SAN DIEGO, CA 92101			1744	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS 01/08/2007		01/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
Office Action Summary	09/912,576	ALLEN ET AL.				
conservation cammary	Examiner	Art Unit				
The MAILING DATE of this communication	Leigh McKane	ith the correspondence address				
Period for Reply	appears on the cover sheet w	ar are correspondence address =				
A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory pe - Failure to reply within the set or extended period for reply will, by si Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNION R 1.136(a). In no event, however, may a in the seriod will apply and will expire SIX (6) MON tatute, cause the application to become Alexandre SIX (6) MON tatute.	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 2	<u> 6 October 2006</u> .					
·	,					
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice und	er <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.				
Disposition of Claims						
4) ⊠ Claim(s) <u>1,3,4,6,7 and 9-52</u> is/are pending 4a) Of the above claim(s) is/are with 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1,3,4,6,7 and 9-52</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction are	drawn from consideration.					
Application Papers						
9) The specification is objected to by the Exan	niner					
10)⊠ The drawing(s) filed on 03 February 2005 is		objected to by the Examiner.				
Applicant may not request that any objection to	the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the contain. The oath or declaration is objected to by the	•					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International Bu * See the attached detailed Office action for a	nents have been received. nents have been received in A priority documents have been reau (PCT Rule 17.2(a)).	application No received in this National Stage				
Attachment/e)						
Attachment(s) 1) Notice of References Cited (PTO-892)	A) T Interview S	Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s	s)/Mail Date				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB Paper No(s)/Mail Date	5) Notice of I 6) Other:	nformal Patent Application (PTO-152)				

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Claim Rejections - 35 USC § 103

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 3, 4, 6, 7, and 9-15, 17-35, and 37-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doi (JP 2000312708, machine translation) in view of Ichihara (U.S. 6,030,554).

Doi teaches a method and apparatus for electron beam sterilization of articles 15. Doi discloses that the articles 15 absorb radiation at different positions in accordance with irregularities in the characteristics of the articles at the different positions. See paragraphs [0004]-[0008]. The articles are provided in a predetermined configuration (side-by-side) within "container" (lower half of 10 in Figure 6A). To provide a uniformity of dosage, a regulator (upper half) 10 is provided to absorb the radiation passing from a source 20 (Figure 5) wherein the regulator 10 is fabricated of a shape and material such that it absorbs radiation passing from the source to the articles at the different positions in the container in accordance with the irregularities in the characteristic of the article at the different positions to maintain the radiation dose at the different positions in the article within particular minimum and maximum limits. The "container" may be moved past the source on a conveyor along with the regulator. See paragraph [0009]. The conveyor moves transverse and substantially perpendicular to the radiation. See Figures 5 and 6A. Doi further teaches that the regulator 10 may be fabricated of a

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material having a "consistency almost equivalent to an irradiated object" and has a shape/geometry complementary to the object. A suggested material is aluminum. See paragraphs [0021] and [0027]; Figure 6A.

While Doi teaches two regulators 10 (wherein the bottom regulator also functions as a container for the articles) in Figures 6A and 6B, Doi is silent with respect to a separate container for the articles, which container holds the articles and wherein the two regulators are disposed external to the container. However, Ichihara discloses that "terminal sterilization", the sterilization of an article within its final packaging, is known in the art in the field of electron beam sterilization. See Abstract. In the invention of Ichihara, an article is placed within a "sealed" (i.e. closed) container which permits transmission of electron beam radiation, but prevents entry of microorganisms into the container. See col.2, lines 31-39. Therefore, once the article is sterilized, it will not be recontaminated by subsequent packaging and/or handling. Likewise, it would have been obvious to one of ordinary skill in the art to package the articles (dialyzers) of Doi prior to sterilization, in order to prevent subsequent recontamination of the dialyzers.

Doi teaches conveying articles 15 past a radiation source 20 in a direction substantially perpendicular to the direction of radiation and the use of a fixture 10 designed to provide a uniform level of absorbed radiation throughout the article. Therefore, although Doi does not specifically disclose that the conveyor moves the articles at a substantially constant speed, it would have been obvious to one of ordinary skill in the art to do so in order to provide a uniform level of absorbed radiation throughout the length of the article. This concept is clearly taught by Doi.

3. Claims 16 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doi in view of Ichihara as applied to claims 15 and 32 above, and further in view of Peck et al. (U.S. 5,590,602).

Doi is silent with respect to spacing adjacent containers and fixtures by a particular distance when being moved past the radiation source. Peck et al. teaches a method and apparatus for electron beam sterilization of articles wherein the articles are conveyed within containers that are spaced from adjacent containers to achieve "optimum article throughput efficiency" (col.5, lines 19-30). Peck et al. further discloses that in order to "most efficiently utilize the energy of the radiation beam emitted by the radiation source 10, the spacing between the article carriers 17 as they are transported by the process conveyor 14 past the radiation source 10 must be as small as practically possible." See col.5, lines 61-65. Therefore, it would have been obvious to space adjacent containers and fixtures being conveyed by the conveyor of Doi by a particular distance within particular limits so as to "most efficiently utilize the energy of the radiation beam emitted by the radiation source".

As to claim 36 specifically, Doi teaches conveying articles 15 past a radiation source 20 in a direction substantially perpendicular to the direction of radiation and the use of a fixture 10 designed to provide a uniform level of absorbed radiation throughout the article. Therefore, although Doi does not specifically disclose that the conveyor moves the articles at a substantially constant speed, it would have been obvious to one of ordinary skill in the art to do so in order to provide a uniform level of absorbed radiation throughout the length of the article. This concept is clearly taught by Doi.

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Response to Arguments

4. Applicant's arguments filed 26 October 2006 have been fully considered but they are not persuasive.

5. On page 3 of the Response, Applicant argues that the "Examiner has not provided a source of any teaching or suggestion of placing a plurality of articles in a container and attaching a dose adjuster externally to the container." The Examiner respectfully disagrees. The combination of Doi with Ichihara teaches exactly this concept. The Examiner is not required to provide a single reference which teaches each and every claim limitation. Indeed, anticipation is not required to reject the claims. In the rejection set forth in the paragraphs *supra*, the combination of Doi with Ichihara meets all the claim limitations and illustrates the *obviousness* of first enclosing the articles sterilized by the method and apparatus of Doi.

Furthermore, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

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Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh McKane whose telephone number is 571-272-1275. The examiner can normally be reached on Monday-Friday (5:30 am-2:00 pm).
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Examiner

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elm

27 December 2006